

Attachment C:

City of Rockville Chapter 5 Building Codes Update and Green Revisions

- Summary of Significant Changes -

The following Codes are being adopted per State law, to replace the previous BOCA codes:

2006 International Building Code (Article V)

2006 International Residential Code (Article VI)

2008 National Electrical NFPA-70 (Article VII)

2006 International Energy Conservation Code (Article VIII)

2006 International Fuel Gas Code (Article IX)

2006 International Mechanical Code (Article X)

2006 International Plumbing Code (Article XI)

Major changes or additions contained within Rockville's local amendments being made to these standard codes include:

Article I – IV – Building and Building Regulations, General

- Revised definitions to be compatible with Zoning Ordinance (i.e. accessory, story, etc.) and historic preservation procedures, and clarified definitions of demolition, addition and alteration [Section 5-2]
- Removed Building Restriction Lines from Chapter 5 [Article II]

Article V – Basic Building Code

- Adjusted the provisions for expiration of permits and providing a fee for extensions. [Sections 105.5 & 105.6]
- Added the requirement for certain use types and larger buildings that fire system design plans be evaluated by a Fire Protection Engineer and that such plans be submitted along with building plans; increases qualifications for FPEDE preparers. [Section 106.1.4]
- Provided new and enhanced fire system sign package. [Section 701.2]

- Added requirement that each floor be zoned separately for fire sprinklers and alarms. [Section 903.1.2]
- Requires smoke control system design report for certain uses and certain atriums. [Section 909.2.1]
- Incorporated the markings of fire hydrants in coordination with the Department of Public Works. [Sections 913.2 & 913.3]
- Introduced Cool Roof requirements [Sections 1507.1.1 and 1507.1.2]
- Added the Radio Amplification System requirements to match the County requirements. [Section 3110]
- Adopted “Existing Building Code” which allows flexibility for renovation and maintenance of existing buildings without triggering standards for “new construction”. [Chapter 34]

Article VI – One and Two Family Dwelling Code

- Adjusted the provisions for expiration of permits and providing a fee for extensions. [Sections R105.5 & R105.6]
- Added clarification to the definition of an “Addition” and when it would require it to be considered a new building/structure. [Section R202]
- Require mechanical ventilation in bathrooms, exhausted to the outdoors [Section R303.3]
- Added the State of Maryland requirement for Carbon Monoxide Detectors in homes. [Section R313.4]
- Eliminated three exceptions for areas of residential dwellings that must be sprinklered (bathrooms, closets/storage rooms, workshops) [Section R325]
- Requiring that residential additions of 125% or more in size must retrofit house for sprinklers. [Section R325]
- Introduced Cool Roof requirements [Sections R905.1.1 and R905.1.2]
- Deleted Chapter 11 Energy Efficiency from residential code, and now reference Chapter 4 of the International Energy Conservation Code (Article VIII).
- Requires the use of Energy Star heating and cooling equipment [Section M1401.1.1]
- Requires low-flow plumbing fixtures [Table P2903.2]

- Allow Gray Water Recycling Systems for non-potable use and subsurface irrigation [Appendix O]

Article VII – Electrical Code

- Added the requirement that Plumbers and Electricians, which are licensed in the City, shall display their license number on company vehicles and advertising materials. [Section 5-141]

Article VIII – Energy Conservation Code

- Proposed changes to residential energy efficiency to improve by 30% above 2006 IECC. [All Sections in the 400s]
- Deleted reference to ASHRAE Reference Standard 90.1-2004 and replaced it with ANSI/ASHRAE/IESNA Reference Standard 90.1-2007 for commercial energy efficiency requirements (an improvement of ~7%) [Section 501.1]
- Commercial buildings also have option to meet New Building Institute *Core Performance Guide*, or several of ASHRAE’s Advanced Energy Design Guides [Section 501.2]

Article XI – Plumbing Code

- Added maximum flow rates for plumbing fixtures. [Table 604.4]
- Added option to use “Grey water system” in buildings; removed plumbing code obstacles. [Appendix C]
- Added enhanced Fats, Oils and Grease (FOG) requirements [Section 1003].
- Added the requirement that Plumbers and Electricians, which are licensed in the City, shall display their license number on company vehicles and advertising materials. [Section 5-261]

In addition to the above replacement codes, additional code changes are as follows:

Deletion of current Article XII – Property Maintenance Code
(being moved to new Chapter 15.5 – Property Maintenance)

Adoption of 2006 International Existing Buildings Code – New Article XIII

Adoption of Green Building Requirements – New Article XIV

Major proposed requirements being made in new Articles to Chapter 5 include:

Article XIV – Green Building Regulations

- All new non-residential and multi-unit residential construction greater than 7,000 sq. ft. must demonstrate how they intend to obtain enough points in the appropriate Leadership in Energy and Environmental Design (LEED®) rating system or equivalent system to achieve a *Rockville Certified* rating. While encouraged, LEED® certification from the U.S. Green Building Council is not required. [Section 5-323]
- All new non-residential and multi-unit residential construction greater than 50,000 sq. ft. must demonstrate how they intend to obtain enough points in the appropriate Leadership in Energy and Environmental Design (LEED®) rating system or equivalent system to achieve a *Rockville Silver* rating. While encouraged, LEED® certification from the U.S. Green Building Council is not required. [Section 5-324]
- All new non-residential and multi-unit residential construction greater than 7,000 sq. ft. must go through a building commissioning process prior to occupancy permit. [Section 5-325]
- All new non-residential and multi-unit residential construction must utilize ENERGY STAR certified appliances, fixtures and components. [Section 5-326]
- Building and homeowner / tenant manuals describing green building features and appropriate operation and maintenance requirements are to be submitted prior to occupancy. [Section 5-327]
- All new non-residential and multi-unit residential construction must meet construction waste management requirements. [Section 5-328]
- All new construction of low-rise residential buildings must achieve National Green Building Standard (NGBS) Silver certification, or demonstrate how they intend to comply with an equivalent LEED® for Homes rating or other equivalent rating system. [Section 5-337]
- All new construction of low-rise residential buildings must meet the Energy Star qualified homes criteria. [Section 5-338]
- All new construction of low-rise residential buildings must meet the Energy Star Indoor Air Package criteria. [Section 5-339]
- Homeowner manual [Section 5-340]
- All new low-rise residential construction must meet construction waste management requirements. [Section 5-341]